Power Mac G4

1. **Dual PowerPC G4 processors**[1]
G4 processors at up to 1.42GHz for performance of up to 21 gigaflops

2. **L3 cache**
Ultrafast dedicated memory feeds processors with data at up to 4GB per second

3. **Up to 2GB DDR SDRAM**
Memory bandwidth up to 2.7GB per second

4. **New FireWire 800 port**
Connect next-generation high-speed peripheral devices at up to 800 Mbps

5. **Dual ATA controllers; four drive bays**
Up to 720GB of internal mass storage with Mac OS X RAID

6. **SuperDrive**[1]
Burn DVDs and CDs twice as fast; a second optical drive is optional

7. **Five expansion slots**
One AGP 4X and four open PCI slots for adding specialized capabilities

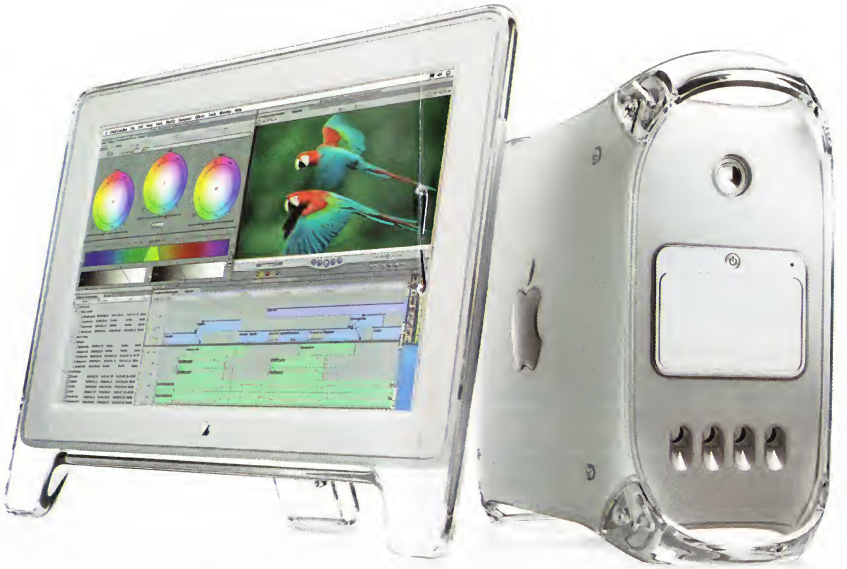
8. **Advanced graphics, dual displays**
Up to 128MB ATI or NVIDIA graphics card supports two all-digital Apple displays[2]

9. **AirPort Extreme and Bluetooth**
Optional 54-Mbps wireless networking,[3] and the latest in connectivity to mobile phones and other wireless peripherals

Super fast. Super affordable. Supercomputer.

The new Power Mac G4 features faster performance, more expansion, and the highly efficient Xserve-based dual processing architecture.

The ultimate system for the digital pro.

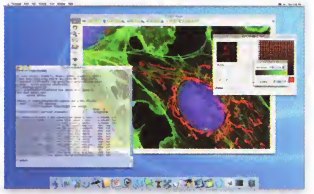


Film and Video

- Dual processors and symmetric multiprocessing enable super-fast real-time editing and effects rendering.
- Up to 2GB of memory, FireWire 800, and four open PCI slots support digital video, standard-definition, and high-definition editing solutions.
- With the new SuperDrive, the Power Mac G4 burns projects and archives assets to DVD or CD twice as fast as before.

Design and Print

- Fast processors, industry-leading graphics, Mac OS X, and dual displays make a robust platform that supports 2D and 3D graphics.
- Adobe Photoshop renders images up to 32 percent faster on the dual processor Power Mac G4 than on the fastest Pentium-based PC.
- Mac OS X v10.2 enhances digital workflow with ColorSync for comprehensive color management, AppleScript automation, PDF support, and robust multitasking.

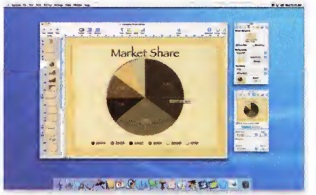


Science and Technology

- Mac OS X runs both UNIX applications and productivity software like Microsoft Office on the same system and provides a true multitasking environment.
- Using BLAST, the Power Mac G4 performs DNA analysis up to 280 percent faster than the fastest Pentium 4–based PC.
- Dual processors with Velocity Engine accelerate processor-intensive applications used for scientific analysis.

Music and Audio

- Faster dual processor configurations support more simultaneous channels, plug-ins, and polyphony than ever before.
- Mac OS X provides high-definition 32-bit, 96kHz digital audio, including DSP and virtual instrument plug-ins.
- FireWire and USB connect high-performance multichannel audio and MIDI devices; stereo in and out jacks connect analog devices.

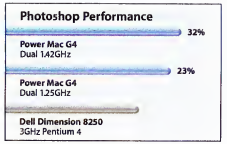


Running Your Business

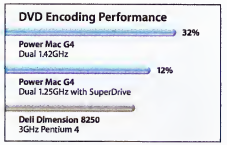
- Businesses can run leading productivity applications such as Microsoft Office, QuickBooks, and Keynote, Apple's new presentation software, plus industry-standard back-office solutions.
- The UNIX-based Mac OS X provides maximum security and a true multiuser environment.
- Power Mac G4 systems integrate easily into mixed computing environments to share files, printers, and other resources.

Applications shown not included.

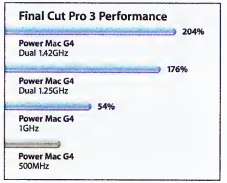
Technical Specifications



Percentage faster based on nine common operations.



Percentage faster encoding video into MPEG-2.[4]



Percentage faster based on six common editing actions.

Tests performed by Apple in January 2003.

Processing and memory

- 1GHz, dual 1.25GHz, or dual 1.42GHz PowerPC G4 processors
- Velocity Engine vector processing unit
- Full 128-bit internal memory data paths
- Powerful floating-point unit supporting single-cycle, double-precision calculations
- Data stream prefetching operations supporting four simultaneous 32-bit data streams
- 256K on-chip L2 cache running at processor speed
- Up to 2MB DDR SRAM L3 cache per processor with up to 4-GBps throughput
- Up to 167MHz system bus supporting over 1.3-GBps data throughput
- 256MB or 512MB of PC2100 or PC2700 DDR SDRAM main memory
- Four DIMM slots supporting up to 2GB of DDR SDRAM using one of the following[5]:
  - 256MB DIMMs (64-bit-wide, 128 or 256 Mbit)
  - 512MB DIMMs (64-bit-wide, 256 Mbit)

Graphics and display support

- One of the following graphics cards installed in a dedicated AGP 4X graphics slot:
  - NVIDIA GeForce4 MX with 64MB of DDR SDRAM
  - ATI Radeon 9000 Pro with 64MB of DDR SDRAM
  - NVIDIA GeForce4 Ti with 128MB of DDR SDRAM (build-to-order option)
  - ATI Radeon 9700 Pro with 128MB of DDR SDRAM (build-to-order option)
- Support for digital resolutions up to 1920 by 1200 pixels and analog resolutions up to 1600 by 1200 pixels
- ADC and DVI connectors; DVI to VGA adapter included
- Dual display support for extended desktop and video mirroring modes
- Support for up to two Apple displays[2]

Connect two Apple all-digital flat-panel displays to double your workspace and productivity.

Storage and expansion

- Four 3.5-inch hard drive expansion bays
  - One 7200-rpm Ultra ATA/100 drive preinstalled in standard configurations: 60GB, 80GB, 120GB, or 180GB[6] (build-to-order option)
  - Support for up to four internal ATA drives (two Ultra ATA/100 and two Ultra ATA/66)
  - Support for up to four internal SCSI drives (requires third-party solution not offered by Apple)
  - Support for a combination of internal ATA and SCSI drives (total of four)
- One of the following optical drives:
  - SuperDrive (DVD-R/CD-RW): writes DVD-R discs at 4x speed, reads DVDs at 8x speed, writes CD-R discs at 16x speed, writes CD-RW discs at 8x speed, reads CDs at 32x speed
  - Combo drive (DVD-ROM/CD-RW); reads DVDs at 12x speed, writes CD-R discs at 32x speed, writes CD-RW discs at 10x speed, reads CDs at 32x speed
  - Optional Combo drive in second optical drive bay
- Four open full-length 64-bit, 33MHz PCI slots
- One AGP 4X slot with graphics card installed

Communications

- 10/100/1000BASE-T Ethernet connector (RJ-45)
- Built-in antennas and expansion slot for optional 54-Mbps AirPort Extreme Card (based on IEEE 802.11g draft specification; 802.11b Wi-Fi certified)[3]
- Built-in 56K V.92 modem[7]
- Optional Bluetooth 1.1 module

Peripherals and audio

- One FireWire 800 port and two FireWire 400 ports (15W total power)
- Four USB ports (two on system, two on keyboard)
- Front headphone jack
- Built-in speaker
- Stereo audio line in and line out minijacks
- Apple speaker minijack for optional Apple Pro Speakers

Size and weight

- Height: 17.0 inches (43.2 cm)
- Width: 8.9 inches (22.7 cm)
- Depth: 18.4 inches (46.8 cm)
- Weight: 42 pounds (19.1 kg)[8]

[1]Selected models. [2]Second Apple flat-panel display requires Apple DVI to ADC Adapter, sold separately. [3]Wireless Internet access requires AirPort Extreme Card, AirPort Base Station or AirPort Extreme Base Station, and Internet access (fees may apply). Some ISPs are not currently compatible with AirPort and AirPort Extreme. Range may vary with site conditions. To achieve data rates up to 54 Mbps, requires an AirPort Extreme Card for each user and AirPort Extreme Base Station. [4]Power Mac G4 with iDVD; Dell Dimension 8250 with Sonic DVDit Professional Edition and Ligos encoder. [5]999MB maximum per application in the Mac OS X Classic environment. [6]1GB = 1 billion bytes; actual formatted capacity less. [7]Appropriate ISP and telephone services required. Your ISP may not support all V.92 features. Modem will function according to V.90 standards if V.92 services are not available. Actual modem speeds lower. [8]Weight varies by configuration and manufacturing process. [9]iDVD requires SuperDrive.

Power Mac G4 Configurations

Model	M8839	M8840	M8841
Processor	1GHz PowerPC G4	Dual 1.25GHz PowerPC G4	Dual 1.42GHz PowerPC G4
L3 cache	1MB DDR SRAM	1MB DDR SRAM per processor	2MB DDR SRAM per processor
System bus	133MHz	167MHz	167MHz
Main memory (2GB maximum[5])	256MB PC2100 (266MHz) DDR SDRAM	256MB PC2700 (333MHz) DDR SDRAM	512MB PC2700 (333MHz) DDR SDRAM
Hard drive	60GB Ultra ATA/100; 7200 rpm[6]	80GB Ultra ATA/100; 7200 rpm[6]	120GB Ultra ATA/100; 7200 rpm[6]
Optical drive	Combo (DVD-ROM/CD-RW)		SuperDrive (DVD-R/CD-RW)
Graphics support	NVIDIA GeForce4 MX with 64MB of DDR SDRAM	ATI Radeon 9000 Pro with 64MB of DDR SDRAM	
Expansion slots and bays	Four open 64-bit, 33MHz PCI slots; AGP 4X slot with graphics card installed; four internal hard drive bays (one occupied); two optical drive bays (one occupied)		
Ports	One FireWire 800 port, two FireWire 400 ports, four USB ports, front headphone minijack and speaker, rear Apple speaker minijack, audio line in and audio line out minijacks, ADC and DVI connectors for dual display support		
Networking	Built-in 10/100/1000BASE-T Ethernet and 56K modem[7]; AirPort Extreme ready[3]; Bluetooth ready		
Software	Mac OS X with Classic environment, QuickTime, iCal, iChat, iLife (includes iTunes, iPhoto, iMovie, and iDVD[9]), DVD Player, iSync, Mac OS X Mail, Microsoft Internet Explorer, EarthLink, Acrobat Reader, Art Directors Toolkit, FAXstf, FileMaker Pro Trial, GraphicConverter, Microsoft Office v. X Test Drive, OmniGraffle, OmniOutliner, QuickBooks for Mac New User Edition, Developer Tools		
Included	Apple Pro Keyboard, Apple Pro Mouse, USB keyboard extension cable, DVI to VGA adapter, modem cable		

Internet access requires a compatible ISP; fees may apply. Product contains electronic documentation. Backup copy of software included.

You can purchase Apple products, including custom-configured computers, from the Apple Store online (www.apple.com or 800-MY-APPLE), an Apple Store near you, or an authorized Apple reseller.

Purchase the AppleCare Protection Plan to extend your built-in service for the Mac OS, Mac hardware, and many Apple consumer applications to three full years from the purchase date of your computer.

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